

CHRC

California Hydropower Reform Coalition
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April 2, 2003

California Energy Commission
Dockets Office
Attn: Docket No. 03-RPS-1078
1516 Ninth Street
Sacramento, CA 95814-5512

Via email: docket@energy.state.ca.us

RE: 03-RPS-1078 – Renewable Portfolio Standard Proceeding

On March 28, 2003, the California Hydropower Reform Coalition (CHRC) filed preliminary comments to the California Energy Commission on the implementation of California's Renewable Portfolio Standard and New Renewable Facilities Program. Please consider these additional comments on the role of hydropower in the RPS program.

Hydropower is a mature, proven, and cost-effective technology for producing electricity without emissions. When the production of hydropower alters flows in natural rivers and streams, it can cause often severe impacts to sensitive river ecosystems and aquatic species. The CHRC supports restricting the RPS program to those projects that do not require new or increased diversion or appropriation of water, as provided in the underlying legislation.

The CEC poses questions relating to the implementation of that standard, and what types of hydro projects may be included or excluded under it. CHRC's interpretation is that the legislative language is relatively restrictive, perhaps limited only to conduit-type hydro facilities. We support that limitation for the reasons outlined below.

We recommend the definition of "new or increased" be measured against a baseline of the actual historic record on a very narrow (or instantaneous) timescale. For example, if a party had a legal right to divert 100 cubic feet per second (cfs) from a river but historically diverted 80 cfs, a hydro project proposing to divert 100 cfs would constitute an increased diversion. Similarly, if historically a project withdrew 50 cfs from a river continuously, a new hydro project that withdrew the same quantity of water, in a pattern of 100 cfs for 12 hours a day, and zero for 12 hours per day, would be an increased diversion.

"Incremental" hydropower projects that add turbines or capacity to existing dams have the potential to be environmentally benign, but such facilities require extraordinary care in design and planning. Because of the potential for harm, we recommend for simplicity's sake such projects be excluded from the program. These projects would for the most part discharge to river channels directly below dams, causing incremental and cumulative impacts to altered river

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California Trout, Foothill Conservancy, Friends of the River, Natural Heritage Institute, Trout Unlimited**

systems whose species may already be at survival thresholds. Changes to the temperature, timing, or quantity of streamflows in these channels constitutes an impact. Furthermore, minimum instream flows currently passing over or through dams often provide non-lethal downstream passage for fish and other aquatic species. Passing these flows through a hydropower turbine would likely eliminate that function. Finally, incremental hydropower could in some cases result in investment in old and uneconomic facilities that otherwise constitute a dam removal opportunity.

Hydropower is one of the most cost-effective methods of generating electricity. In general, the benefits and subsidies of a program like RPS should be focused on new and emerging low-impact renewable technologies moving toward cost-effectiveness. Projects that harm California's rivers and streams or stand in the way of restoration opportunities may or may not pass muster in the marketplace, but in any case should not be subsidized and encouraged through the RPS program.

Thank you for considering these comments. Don't hesitate to contact me at (510) 644-2900 x105 should you have any questions.

Sincerely,

/s/

Stephen M. Wald, CHRC Director
On behalf of
California Hydropower Reform Coalition